

Application Number		Application for (a-urban, b-agriculture, c-DWR/WUE:	
105		a) Prop 13 Urban Water Conservation	
Principle Applicant(Organization/Affiliation)			
Santa Barbara County Water Agency			
Project Title			
Santa Barbara County Commercial, Industrial, Institutional (CII) Rebate Program			
First Name-Authorized		Last Name (AA):	Title
Rob		Almy	Water Ag. Program Manager
Street Address		PO Box	
123 E. Anapamu			
City		State	
Santa Barbara		CA	
Zip Code		Telephone Number(Include Area Code)	
93101		(805) 568-3542	
Fax Number (Include Area Code)		E-mail Address	
(805) 568-3434		ralmy@co.santa-barbara.ca.us	
First Name-Contact Per	Last Name-CP:	Contact-Title	
Rory	Lang	Water Agency Program Specialist	
Contact-Street Address		Contact-PO Box	
123 E. Anapamu			
Contact-City		Contact-State	
Santa Barbara		CA	
Contact-Zip Code		Contact-Phone Number	
93101		(805) 568-3542	
Contact-Fax Number		Contact-E-Mail Address	
(805) 568-3434		ralmy@co.santa-barbara.ca.us	
Funds Requested (dollar amount)	Applicant Funds Pledged (dollar amount)	Total Project Costs (dollar amount)	
\$406,419.00	\$58,075.00	\$464,494.00	
Estimated Total Quantifiable Project Benefits (dollar amount)		Percentage of Benefits to be Accrued by App	
\$24,684,133.00		0.2	
Percentage of Benefits to be Accrued by CALFED or other		Estimated Annual Water to be Saved (acre-fe	
0.8		83	
Estimated Total Amount of Water to be Saved (acre-fee		Over _____ Number of Years	
6751		25	
Estimated Benefits to be Realized (terms of water qual,instream			
Duration of Project (month/year-month/year):		State-Wide	
10/02-09/05		<input type="checkbox"/>	
State Assembly District-location of project(35	State Senate District-location of project(1	18
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County-location of project	Most recent Urban Water Mgt Plan Submitt		
Santa Barbara	1/1/2001		
Type Applicant-Urban(a)Agricl Feas Study(b) Gra	DWR WUE Projects	Project Focus	
b) County		b) Urban	

Project Type:

a) Implementation of Urban Best Management Practices

Quantifiable Objectives

Specify from choice (d) above

Specify from (k) above

Does Proposal involve change in land use (planned/future)ICheck box if yes

☐

Santa Barbara County Commercial, Industrial, Institutional (CII) Rebate Program Proposal: Part II

Project Summary:

There is significant potential for water savings through the implementation of commercial, industrial and institutional (CII) water efficiency programs in Santa Barbara County. The Santa Barbara County CII Rebate Program (CII Rebate Program) will offer CII water customers in Santa Barbara County rebates for ultra low-flush toilets, waterless urinals, pre-rinse spray nozzles for dishwashing, cooling tower conductivity controllers and commercial clothes washers. The goals of the program are to increase water efficiency in the CII sector in Santa Barbara County and to promote retail sales of water saving fixtures and equipment.

The objective of this program is to achieve a long-term water savings of 6,751 AF by replacing old high-water use fixtures and equipment with new CII water efficient fixtures and equipment in CII facilities. Participating Santa Barbara County water purveyors will be the City of Santa Barbara, Goleta Water District, Santa Barbara County Water Agency, City of Santa Maria, Carpinteria Valley Water District and City of Lompoc. Santa Barbara County Water Agency will represent the remaining smaller water purveyors in the county. Agency staff will administer the program and a marketing firm will implement the marketing and outreach to the CII customers. An extensive regional marketing campaign will promote the rebates to the CII sector, creating a clear method for marketing and making it simple for all CII customers from all over the county to participate in the program.

The program cost will be \$464,494.00 with a projected water savings of 6,751 acre feet (AF), with the cost of water saved estimated at \$70 per acre-foot. Grant request is \$406,419.00 and the partner water purveyors match is \$58,075.00

A. SCOPE OF WORK: RELEVANCE AND IMPORTANCE

1. Nature, scope, and objectives

The proposed CII Rebate Program will provide CII customers of Santa Barbara County with a financial incentive in the form of a cash rebate to purchase the CII water efficient devices.

The scope of the CII Rebate Program will include marketing and distribution of \$275,190.00 in rebates to targeted end-use CII customers within a 3-year period. For ULF toilets, marketing will be targeted at those specific end-uses where retrofit of an existing fixture would yield the highest annual and lifetime water savings. Participating Santa Barbara County water purveyors will be the City of Santa Barbara, Goleta Water District, Santa Barbara County Water Agency, City of Santa Maria, Carpinteria Valley Water District and City of Lompoc. The Santa Barbara County Water Agency will be the fiscal agent for the program.

The objective of this program is to achieve a long-term water savings of 6,751 AF by replacing old high-water use fixtures and equipment with new CII water efficient fixtures and equipment in CII facilities. The 3-year specific objectives are to:

- ~~///~~ Replace a minimum of 11% of non-efficient toilets and urinals within Category 1 with ULFTs and waterless urinals.
- ~~///~~ Replace a minimum of .4% of non-efficient toilets and urinals with all other commercial customers with ULFTs and waterless urinals.
- ~~///~~ Replace a minimum of 7.5% of non-efficient clothes washers purchased per year with water efficient clothes washers for coin-operated commercial clothes washer customers.
- ~~///~~ Install a minimum of 15% of cooling tower conductivity controllers.
- ~~///~~ Replace 30% of non-efficient pre-rinse spray nozzles with low-flow pre-rinse spray nozzles.

Table 1. Targeted Device & Equipment Replacements

Replacement Item	Project Category	Project Year 1 2003	Project Year 2 2004	Project Year 3 2005	Total Project
ULF Toilets	Category 1	256	512	640	1408
	Category 2/3	31	31	62	124
	Both Categories	287	543	702	1532
Waterless Urinals		96	181	234	511
High Efficiency Clothes Washers	Laundromats and multi-family common areas	60	60	60	180
Pre-rinse self-closing spray heads	Restaurants	95	95	95	285
Cooling Tower Conductivity Controllers		20	20	20	60

2. Statement of Critical Issues

There are several critical issues that demonstrate the importance of the CII Rebate Program for Santa Barbara County, including periodic droughts and limited local water supplies.

Santa Barbara County has a Mediterranean climate with several microclimates. Summers are warm and dry and winters are cool and often wet. Annual precipitation in the proposed project area varies from 12" in Lompoc to a maximum of about 18" on the South Coast. The region experiences periodic droughts, which have an average duration of five years and a maximum of nine years.

Local water supplies include the Santa Ynez River watershed, with Lake Cachuma a United States Bureau of Reclamation facility, providing the majority of the local surface supply. Participating purveyors are also State Water contractors. The semi-arid climate, periodic droughts and high cost of water locally, make efficient use of the limited water supplies essential.

All participating purveyors are signatories of the Memorandum of Understanding Regarding Water Conservation in California and participate in implementing the 14 Best Management Practices. This program would meet a portion of the coverage requirements for BMP 9. In addition, this program will help local agencies meet the requirements for their Bureau of Reclamation Water Conservation Plans. This program will increase water supply reliability within the Bay-Delta by reducing local water purveyors' need to supplement local water supplies with State Water.

Currently none of the participating purveyors have any CII rebate programs. Although several of the water purveyors within Santa Barbara County have had strong water efficiency programs since the 1970s, these programs have focused mainly on residential water efficiency and have only just begun to tap the conservation potential of the commercial sector. The development of the CII Rebate Program in Santa Barbara County will open up new avenues of water savings for local purveyors.

This program is consistent with local Urban Water Management Plans in that it will meet a portion of the water conservation element of the plan by implementing sections of the best management practice for CII customers.

B. Scope of Work: Technical/Scientific Merit, Feasibility, Monitoring and Assessment

1. Methods, procedures, facilities

Staff of the participating purveyors, Maureen Erbeznik & Associates, and a local marketing firm will implement the Santa Barbara County CII Rebate Program. There will be one regional marketing plan for the program, and a common start and stop date will be used.

This program will be modeled after Metropolitan Water District of Southern California's (MWD) successful "Save Water-Save A Buck" CII Rebate Program. Participating water purveyors' CII customer base is very similar to the CII customer base in MWD service area. Therefore it is appropriate to model this program after a successful existing program. All commercial customers will be eligible for the program, however, the toilet replacement portion of the program will target those business identified as high water use sectors according to the California Urban Water Conservation Council's (CUWCC) 1997

Commercial ULFT Savings Study. High water using sectors include restaurants, grocery stores and supermarkets and distribution centers (Category 1).

The following rebates will be offered based on the experience of MWD's program:

Table 2. CII Rebate Program Amounts

ULF toilets	End Use Category 1: standard tank-type gravity	\$90
	End Use Category 1: all others	\$120
	End Use Categories 2 and 3	\$60
Waterless Urinals		\$60
High-efficiency clothes washers		\$250
Cooling tower conductivity controllers		\$500
Pre-rinse self-closing spray heads		\$50

Marketing and Outreach

Maureen Erbeznik & Associates will conduct marketing and outreach of the program along with a local marketing firm for the first six months of the project so that Maureen can share the techniques that she perfected while working on the Save Water-Save A Buck program with the local marketing firm. Once the marketing element is up and running, the local marketing firm will handle the marketing portion of the program on their own. Regional marketing will include using such contact points and avenues as:

- ~~✍~~ Chain headquarters of CII firms
- ~~✍~~ Industry and trade organization and associations
- ~~✍~~ CII industry contacts
- ~~✍~~ Chambers of Commerce
- ~~✍~~ Trade journals and trade shows

Local marketing and outreach will be coordinated with participating water purveyors and will include:





- ~~✍~~ Water bill stuffers and direct mailings to purveyors' customers
- ~~✍~~ Information at seminars/workshops/special events

Table 3: Expected Market Penetration

Replacement Item	Total Non-Conserving Items: "Market" for Device or Equipment Replacement		Year 1 – Market Penetration	Year 2 – Market Penetration	Year 3 – Market Penetration	3-Year Total Penetration
	Category	Number				
Total toilets per CUWCC Zip Code Data	1	12,800	2.0%	4.0%	5.0%	11.0%
	2 and 3	30,700	0.1%	0.1%	0.2%	0.4%
	Total:	43,500	0.66%	1.25%	1.61%	3.5%
Waterless Urinals	1	4,270	2.0%	4.0%	5.0%	11.0%
	2 and 3	10,230	0.1%	0.1%	0.2%	0.4%
	Total:	14,500	0.66%	1.25%	1.61%	3.5%
High Efficiency Clothes Washers	Laundromats and multi-family common areas	2,400	2.5%	2.5%	2.5%	7.5%
Pre-rinse self-closing spray heads	Restaurants	958	10%	10%	10%	30%
Cooling Tower Conductivity Controllers		100	5%	5%	5%	15%

Rebate Processing and Payment

Participating water purveyors will develop a rebate processing and payment system based on past experience from purveyors' residential ULFT rebate programs. The rebate processing and payment system will include:

-  Rebate application forms
-  Application review
-  Disbursement of rebate checks
-  Rebate tracking system (water purveyors currently have databases developed for residential ULFT rebate tracking and these databases would be enhanced to track CII customer rebates.)

Installation Verification

In order to ensure that efficient fixtures are installed prior to rebate payment, the partner purveyors will conduct site verification of 100% of cooling tower retrofits, 100% of all devices within any one application containing ten or more devices at the same installation, and 10% of all other device installation selected on a random basis.

An intern will be hired for 5- 10 hours per week to assist water purveyors with rebate processing and installation verification.

2. *Task List and Schedule*

The partner purveyors will implement this program by following the procedure outline in the bulleted list below:

- ?? Receive grant funding
- ?? Participating purveyors create a work team
- ?? Set up consulting contract with Maureen Erbeznik & Associates
- ?? Maureen Erbeznik develops marketing and sales strategy with assistance from the work team including:
 - ~~///~~ Identify Manufacturer, Distributor, Retailer and Maintenance Company
 - Operational Issues
 - ~~///~~ Evaluate existing CII rebate programs in other areas of California to identify plusses and minuses of each program to use plusses to design program, including marketing strategies and rebate processing and payment system
 - ~~///~~ Identify major marketplace barriers and motivators and develop a strategy to work around barriers and include motivating factors
 - ~~///~~ Develop sales tools to promote program to CII customers including marketing pieces, a logo, and 800 phone number
 - ~~///~~ Create a sales training program for local marketing firm
- ?? Market program to CII customers
- ?? Send out a RFP for local marketing firm to work with Maureen Erbeznik & Associates
- ?? Hire local marketing firm
- ?? Hire an intern to assist with administrative duties including rebate processing and installation verification
- ?? Create database and incorporate information pertinent to CII customers including historical water use and North American Industrial Classification System Codes
- ?? Maureen Erbeznik and local marketing firm implement industry outreach with review by work team including:
 - ~~///~~ Research product manufactures and Santa Barbara based distributors, retailers and maintenance companies and build database of these companies
 - ~~///~~ Create marketing materials for manufacturers, distributors, retailers and maintenance companies
 - ~~///~~ Distribute materials and train these industry representatives on program requirements and processes
 - ~~///~~ Create a tracking system for industry participation
- ?? Coordinate rebate distribution and issue rebates
- ?? Implement installation verification process
- ?? Monitor water use of participating customers through database tracking
- ?? Prepare quarterly and annual update reports

Each task on the list is essential to the success of the program. If only a portion of the project is funded, each of the costs of the program will be scaled back in proportion to the reduced funding.

Please see Appendix A for detailed schedule.

3. *Monitoring and assessment*

Each of the partner purveyors will compile historical use data from their water billing databases for each CII customer that participates in the rebate program. This information will be entered into a database specifically developed for CII Rebate Program monitoring. The customers' water use will be tracked monthly and any significant changes will be noted and acted upon accordingly. In addition to water use information, the database will also include information regarding the North American Industrial Classification System codes, the type and number of fixtures that were installed and the location of the customer. The partner purveyors will use this information to calculate their coverage of BMP 9. All of the information from the database will be submitted with each quarterly or annual progress report.

Performance measures for the program will include a comparison of estimated number of rebates distributed with actual distribution along with estimated water savings compared to actual water savings.

Information about the program will be shared through a variety of means including reports to the California Urban Water Conservation Council, updates at the Santa Barbara County/San Luis Obispo County Joint Conservation Staff Meetings, presentations at the AWWA conferences and program updates on partner purveyors' websites.

C. Qualifications of Applicants and Cooperators

1. *Resumes* – See Appendix B.
2. *External Cooperators*

Maureen Erbeznik & Associates will provide services for training and local marketing firm for program promotion based on her experience with Metropolitan Water Districts CII Rebate Program.

A local marketing firm will be chosen through a Request for Proposals distributed by the partner purveyors. This firm will work with Maureen for the first six months of the program and will take over the marketing responsibilities for the remainder of the program.

D. Benefits and Costs

1. *Budget Breakdown and Justification*

Please see Appendix C for Budget Breakdown

Budget Justification

Labor Costs

Labor costs for staff of the Santa Barbara County Water Agency, City of Santa Barbara, and Goleta Water District include staff compensation, overhead, materials, and benefits. The number of hours spent by each staff person were estimated from staff time required for development of marketing and rebate programs in the past.

Equipment

No equipment will be purchased as part of this project.

Services or Consultants

Maureen Erbeznik & Associates contract will cover development and implementation of the marketing strategies for the first six months of the program including training of a local marketing firm to take over the marketing element for the remainder of the program. Costs for this portion of the program were based on a proposal for this program from Maureen Erbeznik.

The costs for the local marketing firm are derived from Metropolitan Water District's Save Water-Save A Buck Program at a 10% reduction due to partner purveyors managing the rebate processing and database for the program.

Rebate costs were based on the rebates given in Metropolitan Water District's Save Water-Save A Buck program.

The fees covering the cost of maintaining the toll-free phone number are based on the current costs of maintaining a toll-free number for Santa Barbara County's Project Clean Water.

Supplies

The outreach and marketing costs for the program were estimated from current print and radio advertising costs in Santa Barbara County and printing costs for other similar outreach materials produced by the partner purveyors.

Travel

No travel expenditures are included in this program.

Other Direct Costs

The cost of designing the marketing materials was based on the current salary of the Santa Barbara County Water Agency's Graphic Artist.

2. *Cost-sharing*

The partner purveyors will each select one representative for the CII Rebate Program work team. Each purveyor will be responsible for paying the salary for this person. In addition, the partner purveyors will cover the costs of maintaining the toll-free phone number and the fees for direct mailings, trade show entries, and display materials.

3. Benefit Summary and Breakdown

See Appendix D for Benefits Summary and Breakdown

4. Assessment of Costs and Benefits

See Appendix E for Assessment of Costs and Benefits

E. Outreach, Community Involvement and Acceptance

See Marketing and Outreach strategy in Section B.

Community Involvement and Acceptance

Santa Barbara County businesses are well known for their support of programs that protect the environment and conserve natural resources. In the past 9 years, approximately 45 local businesses have received Green Business Awards for their efforts to protect natural resources. These efforts by business owners and past participation in incentive programs for water efficiency indicate that local businesses will be willing to participate in this program.

In addition, the partner water purveyors currently provide basic commercial business surveys to commercial customers varying from 1-10 surveys per month per purveyor. These surveys show Santa Barbara County commercial businesses have both the interest and the need for improving water efficiency in their facilities.

FISCAL YEAR 2002/2003		OCTOBER												NOVEMBER					DECEMBER					JANUARY					FEBRUARY					MARCH					APRIL					MAY					JUNE					JULY					AUGUST					SEPTEMBER					Projected Cost	Deliverable
ACTION		4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26																	
Secure Funding		Funding Received																																																						\$0.00	Funds for Program													
Program Initiation		Develop Work Team and Schedule Meeting 1																																																						\$225.00	Staff for Program Implementation													
		Set up consulting contract with Maureen Erbezniuk																																																											\$2,250.00	Contract Approved for Maureen Erbezniuk								
Program Implementation		Workteam Meeting																																																											\$3,600.00	Finalized Workplan/Schedule/Budget/Monthly Updates/Issue Resolution								
		Send out RFP for local marketing firm																																																											\$6,000.00		Outreach to Possible Local Marketing Firms							
		Hire local marketing firm																																																											\$2,250.00		Contract Approved for Local Marketing Firm							
		Hire an intern to assist with administrative duties																																																											\$1,125.00		Intern Hired							
		Create CII customer database																																																											\$4,700.00		Database Developed							
		Coordinate rebate distribution and issue rebate checks																																																											\$65,276.00		Program Database							
		Implement installation verification process																																																											\$2,607.00		Rebates Issued							
		Monitor water use of participating CII customers																																																																\$2,607.00	Installations verified			
Marketing		Develop marketing plan and sales strategy																																																																\$7,800.00	Marketing Plan			
		Develop marketing materials for CII customers																																																																\$10,425.00	Marketing Materials for CII customers			
		Implement CII customer outreach																																																																\$27,346.16	Ads/Direct Mailings			
		Develop marketing materials for industry representatives																																																																\$10,150.00	Marketing Materials for industry reps			
		Implement industry outreach																																																																\$9,115.39	Displays at Trade Shows/Communication with Industry Reps			
Program Reporting		Quarterly Report																																																											\$225.00	Quarterly Measure of Success								
		Annual Update																																																											\$750.00	Annual Measure of Success								
		Quarterly Projection																																																											\$29,512.87	\$156,451.54								
		TOTAL ANNUAL COST																																																											\$156,451.54									

FISCAL YEAR 2003/2004		OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	Projected Cost
ACTION		3 10 17 24	1 8 15 22 29	5 12 19 26	2 9 16 23 30	7 14 21 28	4 11 18 25	2 9 16 23 30	6 13 20 27	3 10 17 24	3 10 17 24 31	7 14 21 28	5 12 19 26	
Program Implementation														
	Workteam Meeting													\$900.00
	Coordinate rebate distribution and issue rebate checks													\$99,718.00
	Carry out installation verification process													\$1,976.00
	Monitor water use of participating CII customers													\$1,976.00
Marketing														
	Implement CII customer outreach													\$30,046.16
	Implement industry outreach													\$9,115.39
Program Reporting														
	Quarterly Report													\$300.00
	Annual Update													\$750.00
	Quarterly Cost Projection			\$35,557.89			\$35,107.89			\$37,057.89			\$36,682.87	\$144,406.54
	Annual Cost													\$144,781.54

Deliverable
Monthly Updates
Rebates Issued
Installation of Equipment/Fixtures Verified
Verification of Incremental Water Savings for each Installation
Positive contact with customers/Educational Opportunity/Water Savings
Displays at Trade Shows/Comunication with Industry Reps
Quarterly Measure of Success
Annual Measure of Success

Fixture	Category	Avg Savings/ installed unit		Economic Life of	Size of Market	Number of units installed				Water Savings in Acre-Feet				Lifetime Savings Acre-feet
		gpd	AF			Year 1	Year 2	Year 3	Cumulative	Year 1	Year 2	Year 3	Cumulative	
ULFTs	1	50.7	0.05675	25	12,800	256	512	640	1408	14.528	29.056	36.32	79.904	1997.6
	2 and 3	24.4	0.02733	25	30,700	31	31	62	124	0.84723	0.84723	1.69446	3.38892	84.723
	Total				43,500	287	543	702	1532	15.37523	29.90323	38.01446	83.29292	2082.323
Waterless Urinals	1	49	0.05488	30	4,270	96	181	234	511	5.26848	9.93328	12.84192	28.04368	841.3104
CII Washer		104	0.11648	10	2,400	60	60	60	180	6.9888	6.9888	6.9888	20.9664	209.664
Spray Nozzles		200	0.224	3	958	95	95	95	285	21.28	21.28	21.28	63.84	191.52
Cooling Towers		2000	2.23995	10	100	20	20	20	60	44.799	44.799	44.799	134.397	1343.97
TOTAL SAVINGS														6751.1104

Assumptions:

Average Savings per installed unit estimates were taken from the CII Water Savings Study sponsored by the CUWCC, 1997.

Economic life of CII toilets assumes an equal mix of tank type (20 years) and flushometer type (30 years)

Coin-operated washer savings assumes a use rate of 8 loads per day

APPENDIX C Budget Summary

Item	Amount	Units	Qty.	Total Cost	Units	Life (years)	Present Value	Local Share	Prop 13 Request
DIRECT COSTS									
a. Salaries and Wages									
Santa Barbara County Water Agency Coordinator	\$75.00	\$/hour	225	\$16,875.00	\$	3		\$16,875.00	
City of Santa Barbara Coordinator	\$75.00	\$/hour	150	\$11,250.00	\$	3		\$11,250.00	
Goleta Water District Coordinator	\$75.00	\$/hour	150	\$11,250.00	\$	3		\$11,250.00	
Intern	\$19.00	\$/hour	780	\$14,820.00	\$	3			\$14,820.00
b. Fringe Benefits									
None requested	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
c. Supplies									
Marketing Pieces for CII Customers	\$10,000.00	\$/program		\$10,000.00	\$	3			\$10,000.00
Marketing Pieces for Industry Representatives	\$7,000.00	\$/program		\$7,000.00	\$	3			\$7,000.00
d. Equipment									
None Requested								n/a	n/a
e. Services or Consultants									
Maureen Erbezniak & Assoc. Contract	\$ 75.00	\$/hour	227	\$17,025.00	\$	0.5			\$17,025.00
ULFT Rebate Category 1	\$ 90.00	\$/rebate	704	\$63,360.00	\$	3			\$63,360.00
ULFT Rebate Category 1 Flushometer	\$ 120.00	\$/rebate	704	\$84,480.00	\$	3			\$84,480.00
ULFT Rebate Category 2	\$ 60.00	\$/rebate	124	\$7,440.00	\$	3			\$7,440.00
Waterless Urinals Rebate	\$ 60.00	\$/rebate	511	\$30,660.00	\$	3			\$30,660.00
CII Clothes Washer Rebate	\$ 250.00	\$/rebate	180	\$45,000.00	\$	3			\$45,000.00
Spray Nozzle Rebate	\$ 50.00	\$/rebate	285	\$14,250.00	\$	3			\$14,250.00
Cooling Tower Rebate	\$ 500.00	\$/rebate	60	\$30,000.00	\$	3			\$30,000.00
Advertising Placement (Print and Radio)	\$ 400.00	\$/ad	10.00	\$4,000.00	\$	3			\$4,000.00
800 Number Fees	\$ 2,500.00	\$/year	3 years	\$7,500.00	\$	3		\$7,500.00	
Local Marketing Consultant	\$ 78,384.60	\$/program	1	\$78,384.60	\$	3			\$78,384.60
Direct Mailings, Trade Show Displays, etc.	\$ 10,000.00	\$/program	1	\$10,000.00	\$	3		\$10,000.00	
f. Travel									
None Requested	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
g. Other Direct Costs									
Planning	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Design	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Construction	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Design of Marketing Materials (40 hours)	\$30.00	\$/hour	40	\$1,200.00	\$	3		\$1,200.00	
h. Total Estimated Direct Costs				\$464,494.60				\$58,075.00	\$406,419.60

APPENDIX D Costs and Benefits

Item	Amount	Units	Qty.	Total Cost	Units	Life (years)	Present Value	Beneficiary
Quantified Costs								
Santa Barbara County Water Agency Coordinator	\$75.00	\$/hour	225	\$16,875.00	\$	3	\$16,875.00	n/a
City of Santa Barbara Coordinator	\$75.00	\$/hour	150	\$11,250.00	\$	3	\$11,250.00	n/a
Goleta Water District Coordinator	\$75.00	\$/hour	150	\$11,250.00	\$	3	\$11,250.00	n/a
Intern	\$19.00	\$/hour	780	\$14,820.00	\$	3	\$14,820.00	n/a
Marketing Pieces for CII Customers	\$10,000.00	\$/program	1	\$10,000.00	\$	3	\$10,000.00	n/a
Marketing Pieces for Industry Representatives	\$7,000.00	\$/program	1	\$7,000.00	\$	3	\$7,000.00	n/a
Maureen Erbeznik & Assoc. Contract	\$75.00	\$/hour	227	\$17,025.00	\$	0.5	\$17,025.00	n/a
ULFT Rebate Category 1	\$90.00	\$/rebate	704	\$63,360.00	\$	3	\$63,360.00	CII Customer
ULFT Rebate Category 1 Flushometer	\$120.00	\$/rebate	704	\$84,480.00	\$	3	\$84,480.00	CII Customer
ULFT Rebate Category 2	\$60.00	\$/rebate	124	\$7,440.00	\$	3	\$7,440.00	CII Customer
Waterless Urinals Rebate	\$60.00	\$/rebate	511	\$30,660.00	\$	3	\$30,660.00	CII Customer
CII Clothes Washer Rebate	\$250.00	\$/rebate	180	\$45,000.00	\$	3	\$45,000.00	CII Customer
Spray Nozzle Rebate	\$50.00	\$/rebate	285	\$14,250.00	\$	3	\$14,250.00	CII Customer
Cooling Tower Rebate	\$500.00	\$/rebate	60	\$30,000.00	\$	3	\$30,000.00	CII Customer
Advertising Placement (Print and Radio)	\$400.00	\$/ad	10	\$4,000.00	\$	3	\$4,000.00	n/a
800 Number Fees	\$2,500.00	\$/year	3 years	\$7,500.00	\$	3	\$7,500.00	n/a
Local Marketing Consultant	\$78,384.60	\$/program	1	\$78,384.60	\$	3	\$78,384.60	n/a
Direct Mailings, Trade Show Displays, etc.	\$10,000.00	\$/program	1	\$10,000.00	\$	3	\$10,000.00	n/a
Design of Marketing Materials	\$30.00	\$/hour	40	\$1,200.00	\$	3	\$1,200.00	n/a
Total Cost of Purchase & Installation of Product to Customer less rebate	\$377,025.00	\$/program	all	\$377,025.00	\$	vary	\$377,025.00	
Subtotal				\$841,519.60			\$841,519.60	
Quantified Benefits								
Purveyor Water Savings	6,751	AF	na	\$10,126,500.00	\$	14	\$10,126,500.00	Partner Purveyors/Bay-Delta
Customer Water Savings	6,751	AF	na	\$10,910,872.43	\$	14	\$10,910,872.43	CII Customers
Wastewater Savings	6,751	AF	na	\$3,646,760.60	\$	14	\$3,646,760.60	CII Customers and Wastewater Treatment Plants
Subtotal				\$24,684,133.02			\$24,684,133.02	
Non-Quantified Costs								
None	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Non-Quantified Benefits								
Customer Energy Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	CII Customers
Increased Awareness of Conservation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Partner Purveyors/Purveyors Statewide
Increased Marketshare for Fixtures/Equipment	n/a	n/a	n/a	n/a	n/a	n/a	n/a	CII Customers/Partner Purveyors/Purveyors Nationwide
Coverage for BMP 9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Partner Purveyors/Purveyors Statewide
Analysis Assumptions								
Savings for each fixture were based on the CII Water Savings Study sponsored by the California Urban Water Conservation Council, 1997								
Economic life of CII toilets assumes an equal mix of tank type (20 years) and flushometer type (30 years)								
Coin-operated washer savings assumes a use rate of 8 loads per day								

Assumption & Notes:

Appendix E Present Value Anal

Real Discount Rate:

6.0%

Constant 2001 Dollars

Savings Value of Conserved Water (avoided annualized cost of new water supply), \$/AF:

\$ 1,300

Year	Annual Total Costs	Annual Water Savings Benefit	Net Annual Cost	Present Value Factor	Net Present Value of Cost	Cumulative Net Present Value of Cost (Negative Values = Savings)
1	#####	\$ 121,825	\$ 34,627	0.9434	\$ 32,667	\$ 32,667
2	#####	\$ 268,601	\$ (126,519)	0.8900	\$ (112,601)	\$ (79,935)
3	#####	\$ 429,702	\$ (269,140)	0.8396	\$ (225,976)	\$ (305,910)
4		\$ 346,710	\$ (346,710)	0.7921	\$ (274,627)	\$ (580,537)
5		\$ 346,710	\$ (346,710)	0.7473	\$ (259,082)	\$ (839,619)
6		\$ 346,710	\$ (346,710)	0.7050	\$ (244,417)	\$ (1,084,036)
7		\$ 346,710	\$ (346,710)	0.6651	\$ (230,582)	\$ (1,314,618)
8		\$ 346,710	\$ (346,710)	0.6274	\$ (217,530)	\$ (1,532,148)
9		\$ 346,710	\$ (346,710)	0.5919	\$ (205,217)	\$ (1,737,365)
10		\$ 346,710	\$ (346,710)	0.5584	\$ (193,601)	\$ (1,930,966)
11		\$ 144,738	\$ (144,738)	0.5268	\$ (76,246)	\$ (2,007,212)
12		\$ 144,738	\$ (144,738)	0.4970	\$ (71,930)	\$ (2,079,142)
13		\$ 144,738	\$ (144,738)	0.4688	\$ (67,859)	\$ (2,147,001)
14		\$ 144,738	\$ (144,738)	0.4423	\$ (64,018)	\$ (2,211,019)
15		\$ 144,738	\$ (144,738)	0.4173	\$ (60,394)	\$ (2,271,412)
16		\$ 144,738	\$ (144,738)	0.3936	\$ (56,975)	\$ (2,328,388)
17		\$ 144,738	\$ (144,738)	0.3714	\$ (53,750)	\$ (2,382,138)
18		\$ 144,738	\$ (144,738)	0.3503	\$ (50,708)	\$ (2,432,846)
19		\$ 144,738	\$ (144,738)	0.3305	\$ (47,838)	\$ (2,480,684)
20		\$ 144,738	\$ (144,738)	0.3118	\$ (45,130)	\$ (2,525,814)
21		\$ 144,738	\$ (144,738)	0.2942	\$ (42,575)	\$ (2,568,389)
22		\$ 144,738	\$ (144,738)	0.2775	\$ (40,165)	\$ (2,608,554)
23		\$ 144,738	\$ (144,738)	0.2618	\$ (37,892)	\$ (2,646,446)
24		\$ 144,738	\$ (144,738)	0.2470	\$ (35,747)	\$ (2,682,193)
25		\$ 144,738	\$ (144,738)	0.2330	\$ (33,724)	\$ (2,715,917)
26		\$ 36,457	\$ (36,457)	0.2198	\$ (8,014)	\$ (2,723,931)
27		\$ 36,457	\$ (36,457)	0.2074	\$ (7,560)	\$ (2,731,491)
28		\$ 36,457	\$ (36,457)	0.1956	\$ (7,132)	\$ (2,738,623)
29		\$ 36,457	\$ (36,457)	0.1846	\$ (6,728)	\$ (2,745,351)
30		\$ 36,457	\$ (36,457)	0.1741	\$ (6,347)	\$ (2,751,698)
Total:	#####	\$ 3,826,048	\$ (3,366,953)		\$ (2,751,698)	

ALISON W. JORDAN
2431 Calle Galicia
Santa Barbara, CA 93109
(805) 963-4719
email: whitneyalison@hotmail.com

PROFESSIONAL EXPERIENCE:

Water Resources Specialist
City of Santa Barbara, Public Works Department

July 1998 to present

- ?? Manages City's Water Conservation Program, which includes implementing the 14 Best Management Practices for water conservation as adopted by the California Urban Water Conservation Council. Implements program with two half-time employees. (See description of program below.)
- ?? Project management for water quality capital projects and the youth education component of the City's Clean Water and Creek Restoration Program. Assists with the development of the City's NPDES Permit.
- ?? Project Manager for the Laguna Channel Restoration Project, which includes obtaining permits from various regulatory agencies, overseeing contracts for landscape architect, landscape contractor and biological monitor.
- ?? Administers Recycled Water Program user site coordination, outreach and education.

Water Conservation Specialist
City of Santa Barbara, Public Works Department

May 1990 to June 1998

- ?? Manages City's Water Conservation Program, which includes implementing the 14 Best Management Practices for water conservation as adopted by the California Urban Water Conservation Council.
- ?? Water efficient landscaping education, which includes management of the City public demonstration gardens, conducting landscaping and irrigation workshop and seminars, and developing brochures.
- ?? Conducts water checkups which includes evaluating homes and businesses water use by checking for leaks, irrigation system inspection and scheduling suggestions, and recommendations for improving water efficiency inside and outside.
- ?? Administers youth education program which includes teacher training workshops, development of educational materials, and classroom presentations at City elementary and middle schools,
- ?? Serves on various State and County water conservation committees,
- ?? Administers public information program, which includes developing newsletters, fliers, videos, bill inserts and brochures on water resources, water conservation and recycled water issues.

EDUCATION:

University of California, Santa Barbara

Bachelor of Arts, Environmental Studies, March 1990

PUBLICATIONS:

“Green Gardener Certification Program - Providing Economic Incentives for Landscape Maintenance Professionals to Improve Water Efficiency and Reduce Pollution on Landscape Sites” – published for the AWWA Water Sources Conference, January, 2002

“Monitoring Graywater Use: Three Case Studies in California” – published for AWWA Conserv '99 Conference

“Evolution of Public Information During the Drought and Beyond” and “Implementing and Maintaining a Landscape Water Efficiency Program” – published for AWWA Conserv '93 Conference

“Sustainable Landscaping –Resource Efficient Landscapes for the Central Coast” – coauthored

Various articles for industry publications.

PROFESSIONAL MEMBERSHIPS:

American Water Works Association - Water Conservation Division Member

California Urban Water Conservation Council – Agency Representative

Horticulture Consortium of Santa Barbara – Board Member

California Regional Environmental Education Community Network Region 8 – Steering Committee Chair

Project WET Trainer

COMPUTER SKILLS:

Word, Excel, Pagemaker

ACTIVITIES:

City Orators Toastmasters Club – member since 1991, past officer roles include President, Vice President

UCSB Environmental Associates Board Member since 1995

Court Appointed Special Advocate Volunteer – 1993-1998

SCUBA certified, triathlete, City league volleyball and softball

MARLEE E. FRANZEN
512 Baywood Street
Lompoc, CA 93437
(805) 734-0495 --- mefranzen@aol.com

EDUCATION WASHINGTON STATE UNIVERSITY Pullman, Washington
Master of Science, Chemical Engineering, 1995
Thesis: Effects of Nutrient Pulsing Strategies on *in situ* Carbon Tetrachloride Destruction.

UNIVERSITY OF AKRON Akron, Ohio
Bachelor of Science, Chemical Engineering, 1994 – Cum Laude
- Passed the Fundamentals of Engineering Exam, July 1994

EXPERIENCE GOLETA WATER DISTRICT Goleta, California

September 1999- *Assistant Engineer*

- Present
- Directs the processing of over 100 applications for new or modified water service and is involved in the analysis of these applications to determine construction as well as financial conditions for water service. Projects range in size from single-family dwellings to commercial subdivisions.
 - Addresses development related matters regarding California State Water fees, connection charges, rules, regulations, and ordinances. In 2001, over \$750,000 in fees were collected for approximately 30 applications.
 - Develops and implements the district's water conservation program based on the California Urban Water Conservation Council and Bureau of Reclamation Best Management Practices.
 - Plans, maintains, and oversees Bureau of Reclamation programs including an annual audit of the district's 143 agricultural customers and the Reclamation Reform Act of 1982.
 - Assists in the coordination of interdepartmental and inter-agency projects and programs related to both new development and conservation.
 - Supervises two full-time employees.

LOCKWOOD GREENE Cincinnati, Ohio

September 1997- *Process Engineer*

- February 1999
- Process Group Leader for a \$2 million health and beauty care project during the definition & final design phases. *Responsibilities included:* writing design & construction documents, managing process man-hours, & reviewing capital cost estimates with the client.
 - Team player on projects ranging from a laboratory safety study involving a hazardous material to plant scale designs for raw material and product delivery systems.
 - Sized and specified various equipment, such as pumps and tanks, for use in sanitary systems
 - Created and modified P&IDs and PFDs.
 - Made key contributions during Lockwood Greene's ISO-9000 certification process.
 - Certified Procter & Gamble Process Safety Engineer.

MONTANA DEPARTMENT OF TRANSPORTATION Great Falls, Montana

April 1996 - *Materials Laboratory Engineering Assistant*

- April 1997
- Analyzed soil and asphalt materials used in roadway construction.
 - Operated field equipment, such as a core drill and an auger truck, to sample materials.

WASHINGTON STATE UNIVERSITY Pullman, Washington

Spring 1996 *Engineering Consultant*

- Completed FORTRAN simulations for a bioremediation research project.
- Co-wrote a paper which was published in a peer-reviewed journal.

LUBRIZOL CORPORATION Wickliffe, Ohio

May 1991- *Cooperative Education Student*

- August 1993
- Wrote and implemented batch process operating procedures for a high-pressure system.
 - Coordinated the development of a computerized truck tracking system for a production facility and wrote an ISO-9000 certified system manual for the tracking system.
 - Monitored effluent conditions of a production plant's waste water treatment facility.
 - Worked as a chemical operator, gaining hands-on experience with process equipment.

**ADDITIONAL
INFORMATION**

Member of the following affiliations: American Institute of Chemical Engineers, Tau Beta Pi, the Lompoc Adult Literacy Program, and completed the National AIDS Marathon Training Program fundraiser. *Other interests include:* reading, running, cooking, and quilting.

Rory Lang
4888 Cameo Drive
Santa Maria, CA 93455
(805) 938-1084
rlang@co.santa-barbara.ca.us

Education:

Fall 1988 - Spring 1993 University of Texas at Arlington
B.S. Biology

Spring 1994 - Fall 1995 Texas Christian University
M.S. Aquatic Biology

Employment Experience:

January 2000 - Present **Regional Water Efficiency Program Coordinator**
Santa Barbara County Public Works Department
Managing Regional Water Conservation Program for Santa Barbara County Water Agency. Design and implement water efficiency programs including public information campaigns, school education programs, landscape efficiency education, conservation plans and water management plans.

January 1998 - January 2000 **Business Recycling Program Coordinator**
Santa Barbara County Public Works Department
Managed the Business Recycling Program and Seasonal Recycling Programs for Santa Barbara County Public Works Department, Solid Waste and Utilities Division. Developed and implemented recycling programs for both the residential and commercial sectors including the Business Recycling Program (waste audits, employee training, recycling system development), Christmas Tree Recycling, Telephone Book Recycling, and public information campaigns.

January 1997 - September 1997 **Associate Faculty**
Allan Hancock College, Santa Maria
Instructed Natural History, Humans and the Environment, and Natural Resources Management. Topics included water resources, agricultural resources, wildlife resources, geology, climatology, waste management, hazardous waste management, and taxonomy.

January 1997 - June 1997 **Associate Faculty**
Santa Barbara City College
Instructed Introduction to Biology for non-majors. Topics included chemistry, physics, natural resource management, plant and animal biology, and genetics.

January 1996 - August 1996 **Laboratory Technician**
Dr. John Horner, Texas Christian University
Assisted with laboratory experiments investigating plant-herbivore interactions and modes of speciation in parasitoid insects.

January 1996 - April 1996

Substitute Teacher

Trinity Valley School, Ft. Worth, Texas

Instructed Physical and Life Science to junior high and high school students. Topics included physics, chemistry, physiology, genetics, and ecology.

January 1994 - December 1995

Graduate Teaching Assistant

Texas Christian University

Instructed Introduction to Biology Laboratory to Biology Majors, Introduction to Marine Science, and Invertebrate Zoology. Topics included chemistry, taxonomy, genetics, physiology, ecology, and water science. Conducted original research on ???

June 1993 - August 1993

Laboratory Technician

Southwestern Medical Center, Dallas, Texas

Assisted with research investigating the affects of smoking and vitamins on cholesterol levels.

May 1992 - May 1993

Research Assistant

University of Texas at Arlington, Dr. Robert Sterner

Conducted research investigating methods of culturing freshwater copepods and phytoplankton-zooplankton interactions.

December 1991 - May 1993

Laboratory Technician

University of Texas at Arlington, Dr. Robert McMahon

Assisted with research into the natural control of the exotic zebra mussel, *Dreissena polymorpha*.